

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF THE CLAIMS

1. (withdrawn) An etching solution for etching an electrically resistive material including a nickel-chromium alloy, comprising:
hydrochloric acid; and
thiourea.
2. (withdrawn) An etching solution according to claim 1, wherein said hydrochloric acid is in a range of 5 volume% to 95 volume%.
3. (withdrawn) An etching solution according to claim 2, wherein said hydrochloric acid is about 43 volume%.
4. (withdrawn) An etching solution according to claim 1 wherein said thiourea is in a range of 0.1 ppm to 100 grams/liter.
5. (withdrawn) An etching solution according to claim 4, wherein said thiourea is in a range of 1 ppm to 20 ppm.
6. (withdrawn) An etching solution according to claim 5, wherein said thiourea is in a range of 1 ppm to 2 ppm.
7. (withdrawn) An etching solution according to claim 1, wherein said solution further comprises glycerin.
8. (withdrawn) An etching solution according to claim 7, wherein said glycerin is in a range of 5 volume% to 95 volume%.

9. (withdrawn) An etching solution according to claim 8, wherein said glycerin is about 46 volume%.

10. (withdrawn) An etching solution according to claim 1, wherein said solution further comprises water.

11. (withdrawn) An etching solution according to claim 10, wherein said water is in a quantity sufficient to makeup 100% of volume% total.

12. (withdrawn) An etching solution according to claim 1, wherein said solution is at a temperature in a range of room temperature to about boiling point temperature of said solution.

13. (withdrawn) An etching solution according to claim 12, wherein said solution is at a temperature in a range of 120°F to 180°F.

14. (withdrawn) An etching solution according to claim 13, wherein said solution is at a temperature in a range of 140°F to 150°F.

15. (currently amended) A process for forming an embedded resistor from a resistive foil having a copper layer and a resistive layer including a nickel-chromium alloy having at least one of aluminum and silicon, wherein the resistive foil is bonded to a dielectric layer, the method comprising:

selectively removing portions of the copper layer with a copper etchant to form trace lines; and

selectively etching the resistive layer including the nickel-chromium alloy with an etchant comprised of hydrochloric acid, glycerin and thiourea, wherein ~~said hydrochloric acid is in a range of 5 volume% to 95 volume%~~, said glycerin is in a range of 5 volume% to 95 volume%, and said thiourea is in a range of 0.1 ppm to 100 grams/liter about 1 ppm to 200 ppm.

16. (original) A process according to claim 15, wherein a photoresist is applied to the copper layer to define the trace lines.

17. (original) A process according to claim 16, wherein said photoresist is not removed prior to the selective etching of the resistive layer.

18. (original) A process according to claim 16, wherein said photoresist is removed prior to the selective etching of the resistive layer.

Claim 19 (canceled).

20. (previously presented) A process according to claim 15, wherein said hydrochloric acid is about 43 volume%.

Claim 21 (canceled).

22. (previously presented) A process according to claim 15, wherein said thiourea is in a range of 1 ppm to 20 ppm.

Claims 23-25 (canceled).

26. (previously presented) A process according to claim 15, wherein said glycerin is about 46 volume%.

27. (original) A process according to claim 15, wherein said solution further comprises water.

28. (original) A process according to claim 27, wherein said water is in a quantity sufficient to makeup 100% of volume% total.

29. (original) A process according to claim 15, wherein said solution is at a temperature in a range of room temperature to about boiling point temperature of said solution.

30. (original) A process according to claim 29, wherein said solution is at a temperature in a range of 120°F to 180°F.

31. (original) A process according to claim 30, wherein said solution is at a temperature in a range of 140°F to 150°F.

32. (new) A process according to claim 15, wherein said nickel-chromium alloy includes aluminum and silicon.

33. (new) A process according to claim 32, wherein said nickel-chromium alloy is comprised of 56 wt% nickel, 38 wt% chromium, 4 wt% aluminum, and 2 wt% silicon.

34. (new) A process according to claim 15, wherein said thiourea is in a range of about 1 ppm to 2 ppm.